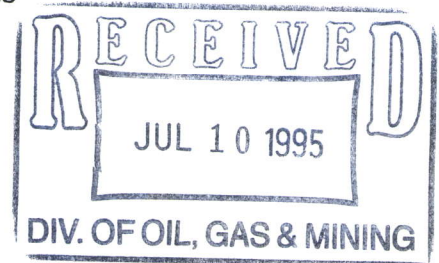


STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
(801) 538-5340  
Fax: (801) 359-3940



**NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS**

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program.

"Small Mining Operations" means mining operations which disturb five or less surface acres at any given time.

\* \* \* \* \*

**I. GENERAL INFORMATION (Rule R647-3-104)**

1. Name of Mine: RIVER RESEARCH MINE
2. Name of Operator/Applicant: RIVER RESEARCH & DEVELOPMENT, L.C.  
Company ( ) Corporation (X) Partnership ( ) Individual ( )
3. Permanent Address: 4676 SOUTH 500 WEST  
City: OGDEN State: UTAH Zip Code: 84405  
Telephone Number: ( )

4. Ownership of Land Surface:

Private (Fee) ☒ Public Domain (BLM) ☐ National Forest (USFS) ☐  
State Trust Land/School Sections ☐ State Sovereign Lands ☐  
Other (please describe): \_\_\_\_\_

5. Ownership of Minerals:

Private (Fee) ☐ Public Domain (BLM) ☐ National Forest (USFS) ☐  
State Trust Land/School Sections ☒ State Sovereign Lands ☐  
Other (please describe): \_\_\_\_\_

Utah Mining Claim Number(s): \_\_\_\_\_  
\_\_\_\_\_



☐ New Road(s): Length \_\_\_\_\_ (ft) Width \_\_\_\_\_ (ft)

☐ Improved Road(s): Length \_\_\_\_\_ (ft) Width \_\_\_\_\_ (ft)

Total project surface acreage to be disturbed: 5 (acres)

Proposed startup date of project (month, year) AUGUST, 1995

Proposed completion date of project, if known (month, year) AUGUST, 2000

#### IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover. To accomplish this, the operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining:

1. Keep the mining operation in a safe, clean, and environmentally stable condition.
2. Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.
3. Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.
4. Construct berms, fences, or barriers, when needed, above highwalls and excavations.
5. Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.
6. Remove all waste or debris from stream channels.
7. Dispose of any trash, scrap metal, wood, machinery, and buildings.
8. Conduct mining activities so as to minimize erosion and control sediment.
9. Reclaim all roads that are not part of a permanent transportation system.
10. Stockpile topsoil and suitable overburden prior to mining.
11. Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.
12. Properly prepare seedbed to a depth of six inches by ripping, discing, or harrowing.
13. Reseed disturbed areas with adaptable species. (The Division recommends seeding 20 lbs./acre of native and introduced species of grass, forb, and browse seed, and will provide a specific species list if requested.)
14. Plant the seed with a rangeland or farm drill, or if broadcast seeded, harrow or rake the seed 1/4-1/2 inch into the soil - fall is the preferred time to seed.

V. VARIANCE REQUEST (Rule R647-3-110)Yes ☐ No ☒

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above, should be identified below and justification given for the variance request(s).

| <u>Item Number</u> | <u>Variance Request Justification</u> |
|--------------------|---------------------------------------|
| _____              | _____                                 |
| _____              | _____                                 |
| _____              | _____                                 |
| _____              | _____                                 |

VI. SIGNATURE REQUIREMENT


I hereby commit to conduct mining operations and to reclaim the aforementioned small mine as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.

Signature of Operator/Applicant:

Name (typed or printed):

Title/Position (if applicable):

Date:

  
KENNETH E. SINKER  
OFFICER  
8-7-85

## ATTACHMENT 1 TO ITEM III

### OPERATING PLAN

### SMALL MINING OPERATION

Owner/Operator: River Research & Development, L.C.

State Mineral Lease No. 45761, dated 2nd November 1992

Land Description: All of that certain land located within Uintah County, State of Utah, to wit:

Township 6 South, Range 21 East, SLB&M

Section 13: Lot 10

Section 14: Lots 5, 6, NE1/4 SE1/4

#### Description of Mining Operation:

The mining operation will consist of the placer removal of gold and precious metals materials from surface deposits of sand and gravel. The operation will consist of the backhoe removal of unconsolidated sand and gravels to an approximate depth of 20 feet below the surface. The removed material will be deposited by the backhoe on a grizzle screen to remove large boulders. The screened material will then be slurry-loaded onto a trammel or wet screen, and from there will be passed through a triple deck screen, from which -100 material will be loaded into a settling tank. If clay is encountered, a suitable deflocculant will be added to aid in the separation from the precious metals bearing material from the clay binder. A biodegradable detergent will be added to reduce the surface tension of the water. From the settling tank, the gold-bearing slurry will be augured into a separation tower, from which the gold concentrate will be separated by gravity, removed, dried and loaded by batches into a furnace. The furnace will produce a dore bar product for shipment and further refining. Slag from the furnace, consisting of ash and clinker slag, will be deposited on site by burial.

The water for the operation will be initially obtained from the Green River, which is adjacent to the property, by use of existing water rights. Used water will flow into a small settling pond before being reused or returned to the river. The initial water usage will be 8 gallons per hour, rising to 500 gallons per hour, maximum.

Electric power for the operation of the trammel and other motor-driven equipment will be obtained from a diesel generator of 100KW or less capacity. The dore furnace will be fired by propane or bottled natural gas. The backhoe will be diesel driven.

The operation will initially commence as a one yard per hour operation, with a maximum expansion to a 60 yards of material per hour operation, involving a maximum of eight people per shift, two shifts per day or approximately 600 yards of material processed per day. It is expected that operations will consist of approximate disturbance of one to two acres at a time, with reclamation being completed as a section is fully mined.

All sand and gravel, after screening and decanting, will be stockpiled and used to fill exhausted open cuts. Prior to commencing operation in an area, topsoil will be removed and stockpiled. Upon completion of a section of the operation, sand and gravels will be graded and smoothed, topsoil recovered, and the material will be seeded with native vegetation and sprinkled to initiate growth.

Access to the site will be by dirt and gravel road by gasoline or diesel powered equipment.

Human waste will be handled by the installation of portable toilets, with the contents removed as needed. Rubbish will be removed from the site and taken to a local garbage collection site or recycling center, as appropriate.

There will be on-site fuel storage by above-ground fuel tanks of 1,000 gallons each. All fuel sites will be bermed and lined.

At any one time, no more than 5 acres will be disturbed.